

REMARKS

Favorable reconsideration of this application is respectfully requested in light of the following remarks.

As an initial matter, the drawings stand objected to under 37 C.F.R. §1.83(a). In particular, the Examiner alleges that the feature of the "printing portion" is not shown in the drawings. However, Applicant directs the Examiner's attention to paragraph [0026] on page 6 of the present application. In particular, the last sentence of [0026] discloses that a print engine 16 executes image formation and a control unit 18 controls the print engine 16. Accordingly, these features illustrate an exemplary embodiment of the claimed "printing portion".

In addition, the drawings stand objected to because the Examiner states that the arrow that indicates "to engine" should be changed to read "to engine control unit" in both Figures 2 and 7. As a result, Applicant has amended the application to incorporate the suggestions made by the Examiner. Accordingly, withdrawal of the drawing objections is respectfully requested.

Claims 1-3 and 6-9 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,347,203 to *Kutsuwada*. Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Kutsuwada* in view of U.S. Publication No. 2004/0153530 A1 to *Machida*.

A disclosed, non-limiting embodiment of the present invention pertains to an image forming apparatus and method. In particular, the present invention relates to printing control in a single multi-purpose apparatus providing a plurality of functions such as printer, fax, copier and the like. As described in the background of the invention, when a print job of a plurality of pages is processed by the printer

controller, the printer controller has exclusive use of the engine from the moment a first page is received and a printing process is enabled. Even when much time is required for receiving the remaining pages and development processing, the controller maintains exclusive use of the engine until print processing of all pages is completed regardless of whether the engine is capable of executing print processing during this time. As such, cancellation of the exclusive use by the controller which has exclusive use of the engine is awaited even when another controller receives data and is capable of print processing during this time.

The present invention solves this problem by providing an imaging forming apparatus, control method, image data processing method and program product of the present invention. In particular, independent Claim 1 recites an image forming apparatus including a printing portion for printing based on received print data. A plurality of controllers are provided for respectively receiving a print job and generating image data by image development of the received print job. Each controller requests the printer portion to start printing after complete image development of the received print job. These features are defined in independent Claim 1. In addition, Claims 7, 8 and 9 also recite that a printing portion begins printing after complete image development of the received print job. This allows image data to be processed within the controller, thereby freeing up the print engine specifically for printing operation. None of the art of record discloses patentable features.

In contrast, *Kutsuwada* discloses an image forming apparatus and job control apparatus for a sheet discharge processing unit. The Examiner points to column 7, lines 56-60 for allegedly disclosing the feature of each controller requesting the

printing portion to start printing after complete image development of a received print job. However, *Kutsuwada* does not disclose that the controller requests the printing portion to start printing after complete image development of a received print job. In contrast, *Kutsuwada* discloses the sequence of printing in Fig. 7. There is no indication of a process wherein the printing is started only after complete image development of a print job. In fact, *Kutsuwada* implies the opposite. Note pattern (3) in Fig. 6, wherein printing jobs are interspersed with each other. Accordingly, *Kutsuwada* fails to disclose the patentable features of independent Claims 1, 7, 8 and 9.


For at least the foregoing reasons, it is submitted that the apparatus, method and program product of the present invention, and the claims depending therefrom, are patentably distinguishable over the applied document. Accordingly, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application, or should the Examiner believe a telephone conference would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests to be contacted at the number indicated below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: May 24, 2005

By:  Reg. No. 35,333
Elaine P. Spector
Registration No. 40,116

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings include changes to Fig. 2 and Fig. 7. These sheets, which include Figs. 2 and 7, replace the original sheets including Figs 2 and 7. In Figs. 2 and 7, the arrow that indicates "to engine" has been changed to read "to engine control unit".

Attachments: Replacement Sheets
 Annotated Sheets Showing Changes

ANNOTATED SHEET

Appln. Filing Date: August 23, 2001

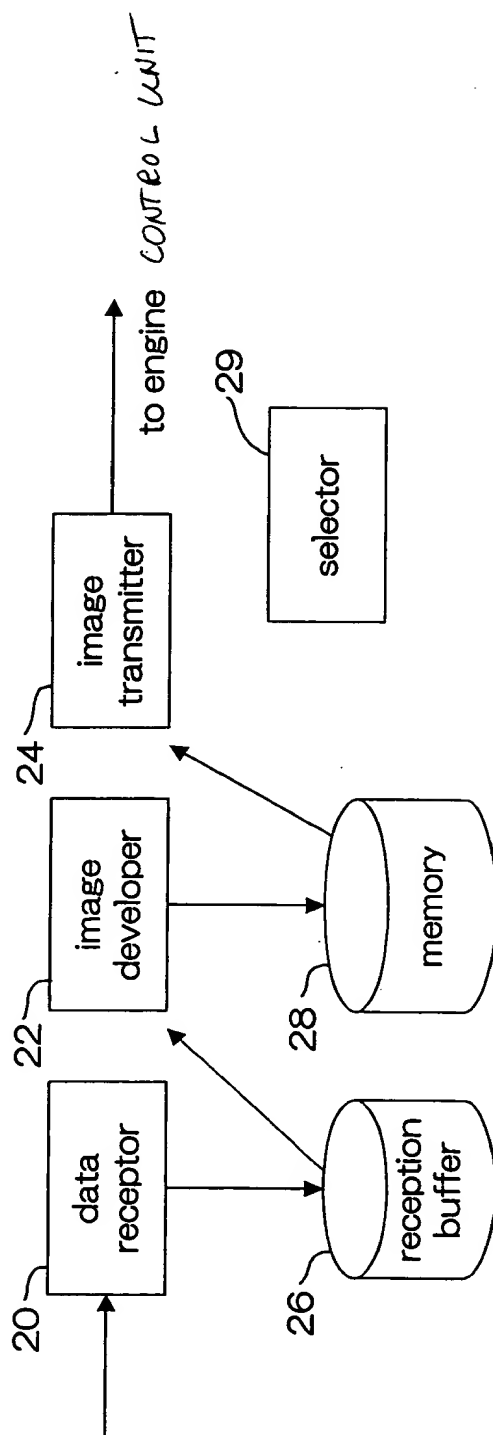
Title: IMAGE FORMING APPARATUS AND METHOD

Inventor(s): Kiyoshi Miyake

Appln. No.: 09/934,480

Sheet 1 of 2

Fig.2



ANNOTATED SHEET

Appln. Filing Date: August 23, 2001

Title: IMAGE FORMING APPARATUS AND METHOD

Inventor(s): Kiyoshi Miyake

Appln. No.: 09/934,480

Sheet 2 of 2

Fig. 7

